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10/811,563	03/29/2004	Victor L. Serebruany	0004.0001-000	1385

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EXAMINER	
PAGONAKIS, ANNA	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/811,563	SEREBRUANY, VICTOR L.	
	Examiner	Art Unit	
	ANNA PAGONAKIS	4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,22,23,27 and 28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,22,23,27 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7 sheets; 10/01/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's election of Group I, claims 1-14, 22, 23 and 27-28 and specie election of myocardial infarction and atorvastatin filed on 11/13/2007 is acknowledged. Because applicant did not distinctly and specifically point out supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP 818.03(a)).

Accordingly, no claims have been amended, added or cancelled. Claims 20 and 21 are drawn to non-elected subject matter.

Claims 1-14, 22, 23, 27 and 28 are presently under examination and are the subject of this Office Action.

Specification

The use of the trademarks TICLID®, PRAVIX®, REOPRO®, INTEGRILLIN®, and AGGRASTAT® of the specification has been noted. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use if any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-23, 27-28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the instant case, the specification does not provide sufficient information to one of skilled in the art to practice the instant invention without undue experimentation.

Ex parte Forman (230 USPQ 546, BdPatApp & Int.) and *In re Wands* (858 F.2d 731, 8 USPQ2d 1400, 1404, Fed. Cir. 1988) provide several factors in determining whether the specification of an application allows the skilled artisan to practice the invention without undue experimentation. Having said factors in mind, the instant specification fails to reasonably provide enablement for methods of preventing the claimed condition. Specifically, the recitation of "preventing myocardial infarction" in the instant claim 1 directs the claim to method of preventing a pathological condition. However, the specification fails to properly enable such methods.

In the instant case, the burden of enabling for preventing myocardial infarction requires appropriate screening testing, subsequent data compilation, and finally appropriate data analysis, to assess and properly enable one skill in the art whether

myocardial infarction are prevented from formation in a patient. For example, the specification must provide adequate guidance whether myocardial infarction can be prevented from forming in a patient, once the composition is administered to a subject susceptible to develop myocardial infarction.

Moreover, the specification must provide direct evidence associating the claimed prevention to the composition applied. The burden of showing preventative properties is greater than that of enabling a treatment, because one of ordinary skill in the art must not only show competent screening of those subjects susceptible to such conditions, but also show that the efficacy of a preventative method is directly caused by applying or administering the instantly claimed composition to the susceptible subjects.

In this case, there is no teachings for screening methods identifying susceptible subjects nor is there any direct evidence of efficacy establishing a preventative property associated with the claimed composition. Furthermore, the state of the prior art concerning methods of preventing myocardial infarction in an otherwise healthy patient is not well described, nor does it provide for any absolute prevention. It is well-known that essential myocardial infarction can be caused by ischemia to the heart, but ischemia can have various etiologies, i.e., trauma, atherosclerosis, restenosis, embolism, etc. It is not clear how administering atorvastatin would be able to address all of the etiologies as known to clinicians. Accordingly, undue experimentation is necessary to determine screening and testing protocols to demonstrate the efficacy of the presently claimed invention.

Any patients without myocardial infarction is construed to be patients in nedd of preventing myocardial infarction.

Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claim 13 fails to state what the particular vascular treating compound is.

Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claim 1 fails to state what a "norrmal range" for a total-C or LDL-C level is

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 9, 22, 23 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 1, 9, 22, 23 and 27 are indefinite because the term "effective amount" in claims 2 and 10 are not clear. The phrase "an effective amount" has been held to be indefinite when the

claim fails to state the function which is to be achieved and more than one effect can be implied from the specification or the relevant art. In re Fredericksen 213 F.2d 547, 102 USPQ 35 (CCPA 1954).

The specification does not indicate what a "effective amount" is. The specification does not provide a teaching for treating a disease/condition in a patient with any amount of ZD6474 and a taxane. Therefore, the metes and bounds of an "effective amount" in claims 2 and 10 cannot be determined, which renders claim 2 and 10 indefinite.

Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The MPEP sets forth the following at 2173:

> "The primary purpose of this requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent. A secondary purpose is to provide a clear measure of what applicants regard as the invention so that it can be determined whether the claimed invention meets all the criteria for patentability and whether the specification meets the criteria of 35 U.S.C. 112, first paragraph with respect to the claimed invention." (See MPEP 2173).

The term "about" in the expressions "about 200 mg/dL" (see instant claim 3) and "about 130 mg/dL" is a relative term that renders the claim indefinite. The expression "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and thus one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The use of such a term would invite

subjective interpretations of whether or not a given amount of microgram is included or excluded from the present claims and what degree of variability outside the recited range is within the scope of the claims. It is the Examiner's position that the public would not be reasonably informed of the boundaries of what constitutes infringement of the present claims.

The claims do not meet the tenor and express requirements of 35 U.S.C. 112, second paragraph and are properly rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-14, 22, 23, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitney et al. in view of Orloff.

Whitney et al. teach of methods for preventing or reducing the risk of a first occurence of a cardiovascular event using an HMG-CoA reductase inhibitor alone or in combination with another lipid altering agent (abstract). Examples of HMG-CoA inhibitors include atorvastatin (column 1, last paragraph). Atorvastatin in taught to sufficient treatment for myocardial infarction. Subjects to be treated with the instant methods are those having an average to mildly elevated serum total cholesterol level which is intended herein to be a level less than or equal to

about 260 mg/dL (column 4, last paragraph). Furthermore, an average to mildly elevated low-density lipoprotein cholesterol level is 130 mg/dL to 190 mg/dL (column 5, first paragraph). Whitney et al. further teach that the risk reduction of a fatal or non-fatal myocardial infarction using atorvastatin is expected to be at least about 17 percent and more particularly about 17 to 57 percent (see column 9, lines 21-25, also note claims 36 and 377)

It would be obvious to one skilled in the art at the time of the invention would have found it prima facie obvious to employ the results found in DeBonis et al. and Novac et al. with a reasonable expectation of success because of the clear treatment of myocardial infarction achieved by the elected statin, atorvastatin.

The explanation of an effect obtained when using a compound cannot confer novelty on a known process if the skilled artisan was already aware of the occurrence of the desired therapeutic effect. In other words, even if the reducing of PAR-1 or PAR-4 levels was not itself recognized as a pharmacological effect of administering the elected statin, atorvastatin, such an effect (capability to treat myocardial infarction) is already known in the art. Though new properties of a compound are no doubt important contributions to scientific and pharmacological development, the assessment of patentability under 35 U.S.C. 103 is based upon the therapeutic applications and effects of the compounds, not the mechanisms or properties by which they exert such a therapeutic effect. It is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe inherently includes functions that are newly cited or is identical to a product instantly claimed. In such a situation the burden is shifted to the applicants to "prove

that subject matter shown to be in the prior art does not possess characteristic relied on" (205 USPQ 594, second column, first full paragraph).

Please also see Ex Parte Novitski, 26 USPQ2d 1389 (Bd. Pat. App. And Inter. 1993), which stated, "The Board rejected a claim directed to a method for protecting a plant from plant pathogenic nematodes by inoculating the plant with a nematode inhibiting strain of P. cepacia. A U.S. Patent to Dart disclosed inoculating using P.cepacia type Wisconsin 526 bacteria for protecting the plant from fungal disease. Dart was silent as to nematode inhibition but the Board concluded that nematode inhibition was an inherent property of the bacteria. The Board noted that Applicant had stated in the specification that Wisconsin 526 an 18 percent nematode inhibition rating." Analogously, in the present case, though DeBonis et al. and Novac et al. do not explicitly note the function of the elected compound as a TGF beta antagonist, such a property, though only now recognized by Applicant, is an inherent property of the elected compound, absent factual evidence to the contrary.

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNA PAGONAKIS whose telephone number is (571)270-3505. The examiner can normally be reached on Monday thru Thursday, 9am to 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AP

/Ardin Marschel/
Supervisory Patent Examiner, Art Unit 1614